

ABSTRACT OF THE DISCLOSURE

An immunoisulatory vehicle for the implantation into an individual of cells which produce a needed product or provide a needed metabolic
5 function. The vehicle is comprised of a core region containing isolated cells and materials sufficient to maintain the cells, and a permselective, biocompatible, peripheral region free of the isolated cells, which immunoisolates the core yet provides for the delivery
10 of the secreted product or metabolic function to the individual. The vehicle is particularly well-suited to delivery of insulin from immunoisolated islets of Langerhans, and can also be used advantageously for delivery of high molecular weight products, such as
15 products larger than IgG. A method of making a biocompatible, immunoisulatory implantable vehicle, consisting in a first embodiment of a coextrusion process, and in a second embodiment of a stepwise process. A method for isolating cells within a
20 biocompatible, immunoisulatory implantable vehicle, which protects the isolated cells from attack by the immune system of an individual in whom the vehicle is implanted. A method of providing a needed biological product or metabolic function to an individual,
25 comprising implanting into the individual an immunoisulatory vehicle containing isolated cells which produce the product or provide the metabolic function.